

State of Alaska  
Department of Fish and Game  
Nomination for Waters  
Important to Anadromous Fish

1992  
Year of Revision  
ALASKA DEPT. OF  
FISH & GAME

Anadromous Water Catalog Volume R-1

USGS Quad CRAIG B-1

Name of Waterway NOT CONNECTED TO ANY NAMED OR NUMBERED SYSTEM

Anadromous Water Catalog Number of Waterway NONE

NOV 14 1991

REGION II  
HABITAT DIVISION

102-60-10572

Change to Atlas

Catalog

X Both

Addition X

Deletion       

Correction       

Name addition:

USGS name       

Local name BLACK ROCK CREEK

For Office Use

Nomination # 92 275

Richard Reed 11/12/91  
Regional Supervisor Date

EQ Wein 2/20/92

F1 1/23/92  
Drafted Date

Species	Date(s) Observed	Spawning	Rearing	Migration
COHO	4/15/91		X	

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

NO BARRIERS TO FISH PASSAGE OCCUR BETWEEN ITS LAKE ORIGIN AND ITS OUTLET AT KASAAH BAY. MIGRATION AND SPAWNING HABITAT EXTEND APPROXIMATELY 450 FEET UPSTREAM FROM ITS MOUTH TO A MUSKEG/BEAVER POND SYSTEM CONTAINING NUMEROUS, DEEP (>3') SIDE CHANNELS. ONE REARING COHO JUVENILE TRAPPED IN UPPER 2/3 OF THIS SYSTEM. STREAM EXTENDS APPROXIMATELY 200 FEET THROUGH THIS PONDED WETLAND. UPSTREAM OF THIS SYSTEM, AND FOR APPROXIMATELY 2600 FEET TO ITS ORIGIN AT THE LAKE, THE STREAM IS LOW GRADIENT AND CONTAINS MODERATE TO LARGE ACCUMULATIONS OF LWD. TWO REARING COHO JUVENILES TRAPPED APPROXIMATELY 1000 FEET DOWNSTREAM OF LAKE OUTLET. ATTACH A COPY OF A MAP SHOWING LOCATION OF MOUTH AND UPPER POINTS OF EACH SPECIES, SPECIFIC STREAM REACHES IDENTIFIED FOR SPAWNING OR REARING, LOCATIONS OF BARRIERS, SUCH AS FALLS. ATTACH A COPY OF THE FISH SURVEY DATA, IF AVAILABLE.

Name of Observer (please print) KEVIN J. HANLEY

Date: 10/16/91 Signature: Kevin J. Hanley

Address: ADFG/ Ktn.

Signature of Area Biologist:

Jack Gustafson



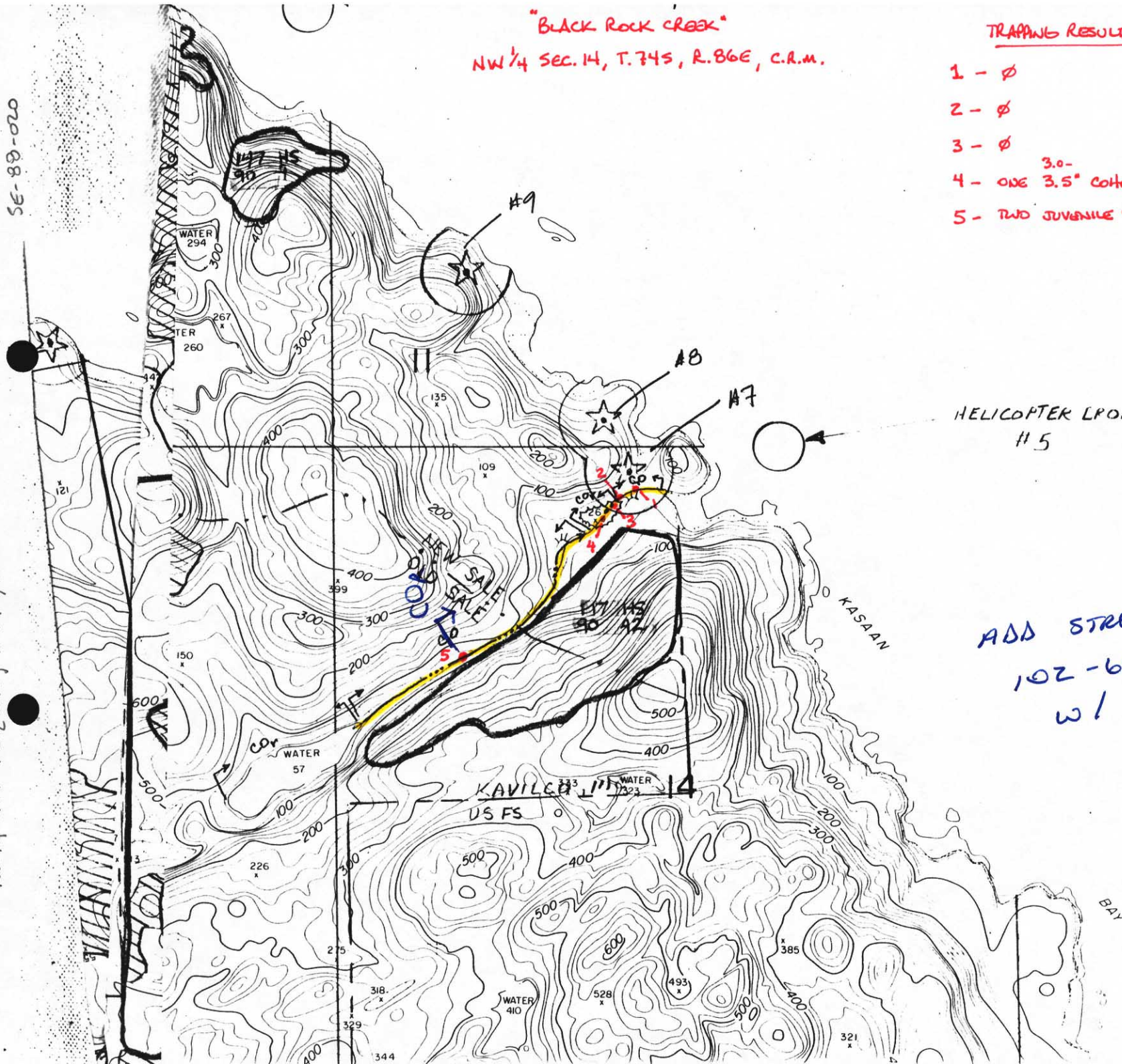
"BLACK ROCK CREEK"  
NW 1/4 SEC. 14, T. 74S, R. 86E, C.R.M.

TRAPPING RESULTS: 4/15/91

- 1 -  $\emptyset$
- 2 -  $\emptyset$
- 3 -  $\emptyset$
- 4 - <sup>3.0-</sup> ONE 3.5" COTTO SMOLT
- 5 - TWO JUVENILE COTTOS

SMITH COVE HBL,  
SE-89-020

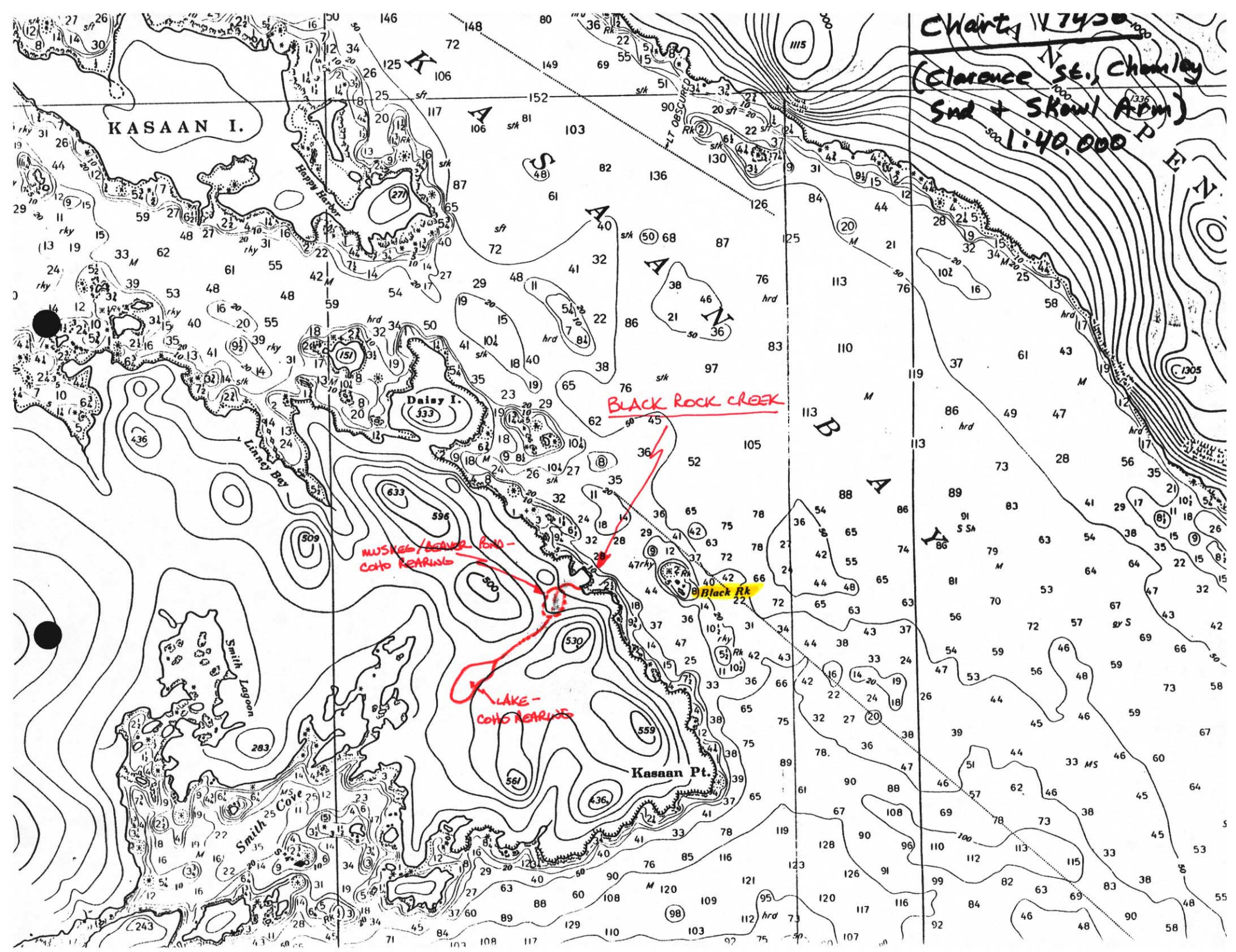
NW 1/4 S. 14 & E 1/2 S. 15, T. 74S, R. 86E CAN



HELICOPTER LPOF ZONE  
#5

ADD STREAM #  
102-60-10572  
w/ COR







"BLACK ROCK" CREEK

- MUSKIEG/BEAVER POND WITH NUMEROUS DEEP (>3') SIDE CHANNELS ~ 1 REARING COHO JUVENILE TRAPPED
- LOW-GRADIENT CHANNEL WITH MODERATE TO LARGE AMOUNTS OF LWD ~ 2 REARING COHO JUVENILES TRAPPED
- LAKE ~ THOUGH NOT TRAPPED AND NO FISH WERE OBSERVED, THIS LAKE EXHIBITS EXCEPTIONAL REARING HABITAT. NO BARRIERS TO FISH PASSAGE OCCUR BETWEEN LAKE AND THE STREAM'S OUTLET AT KASAAN BAY
- STREAM REACHES EXHIBIT SUITABLE SPAWNING HABITAT CHARACTERISTICS





MEMORANDUM

TO: File

FROM: Jim Durst *JD*

DATE: 3/29/91

RE: Stream Inspections - Smith Cove Helicopter (SE-88-020)

The following is an edited version of the Field Inspection Report on this issue:

On March 20, 1991, Greg Staunton (ITT), Al Peterson (ADNR), and I conducted a Forest Practices Inspection of planned ITT Rayonier units of the Smith Cove Helicopter operation. The primary purpose was to examine streams for fish habitat. There are no cataloged anadromous fish streams in these units.

Unit 111: Timber from this unit is planned to be flown to drop #3. Staunton indicated that the unit is scheduled for selective harvest, and that most of the trees in the vicinity of the stream are not merchantable. We walked the stream at the head of Linney Bay to the point at which it forks, approximately 250 feet upstream of the mean high tide line. Salt tolerant vegetation covers the mud flats at the mouth of the stream, with several trees lying across the flats and the stream. The first 75 feet of the stream is 7-8 feet wide, with a gradient of about 5%. The substrate is about half gravel less than 4 inches diameter, and half 4-12 inch diameter cobbles. The reach from about 75-125 feet above the high tide line is about 6-7 feet wide, with a gradient of 9-11%. The substrate is about 90% gravel less than 4 inches diameter. The reach from 125-250 feet above the high tide line is mostly less than 5 feet wide, with a gradient of 4-7%, and gravel substrate mostly 1-4 inches diameter. At 250 feet above the high tide line, the stream forks. The west fork is about 1 foot wide, with a low gradient and small gravel substrate. The east fork is about 4 feet wide, with a low gradient and medium gravel. Neither fish nor evidence of fish (e.g., bones) was seen at this location, although the presence of some snow on the ground and logs may have obscured the presence of fish sign. This stream has fair potential as an anadromous fish stream.

*Black Rock Creek* { Unit 117: We walked this stream from the cove west of Black Rock to a point about halfway to the lake at the stream's upper end. The mouth of this stream is rocky, with no developed estuary. The stream is typically 6-10 feet wide, with a gradient of 4-7% wherever examined throughout the examined length. The first about 450 feet of the stream is bedrock contained, with a gravel (about 2 inches diameter) and cobble substrate. The banks are incised, and there is abundant large woody debris. At the upper

end of this reach lies a large muskeg/beaver pond system. The stream meanders for about 200 feet through the emergent wetland vegetation with numerous deep sections. The substrate is silty near the outlet of the muskeg, and gets more gravelly nearer the point where the stream enters it. About the muskeg, the stream is controlled by vegetated banks and associated woody vegetation. Numerous seeps enter from the side, although most of these were frozen at the time of this examination. Large woody debris was abundant. A few hundred feet above the muskeg (about where the stream enters Unit 117), the stream enters a reach about 100 feet long that is bedrock controlled with larger substrate. Above that reach, the stream again gently wanders, is substrate controlled, and has a gravel substrate about 1 inch diameter. There was no apparent barrier to fish passage observed. Neither fish nor evidence of fish (e.g., bones) was seen at this location, although the presence of some snow on the ground and logs may have obscured the presence of fish sign. There was a large amount of mammal sign (mink?), things such as shell fragments and slides. A piece of shell (abalone?) was found by Peterson at the upper extent of our inspection. This stream has very high potential as an anadromous fish stream.

I have requested the opportunity to trap these streams for anadromous fish, using baited minnow traps, at a time when fish are susceptible to such methods. It is our understanding that ADNR (Peterson) has scheduled trapping on April 10, 1991. While fish will likely not be as active (and hence susceptible to being trapped) on this date as they will be later in the spring, I am hopeful that the information gained on that date will assist us in evaluating these streams as anadromous fish habitat. However, the uncertainties of trapping and the species involved may prevent the meaningful interpretation of no catches if that is the case.



**ALASKA DEPARTMENT OF FISH AND GAME**

2030 SEA LEVEL DRIVE  
SUITE 205  
KETCHIKAN, ALASKA 99901-6073

April 30, 1991

Mr. Greg Staunton  
I.T.T Rayonier, Inc.  
P.O. Box 7596  
Ketchikan, Alaska 99901

Dear Greg:

Re: Forest Practices Inspection - Smith Cove Helicopter  
(SE-88-020) - Fish Trapping

On April 15, 1991, you, Al Peterson (ADNR), and I conducted a detailed follow-up examination of the two unnamed, uncatalogued streams which were identified during the March 20, 1991 inspection as exhibiting high potential for use by anadromous fish. In order to verify this use and determine the proper classification and riparian protection needs of these streams, each was trapped at various locations throughout their lengths using baited minnow traps. For the purpose of this report, the stream which forms the western boundary of Unit 117 is identified as Black Rock Creek and that which bisects Unit 111 is identified as Linney Creek. Channel characteristics of these streams were previously described in our March 29, 1991 inspection report. The results of this trapping are as follows:

**Black Rock Creek**

Seven traps were set at various successive upstream locations as we traversed the stream from its estuarine outlet to the lake at its upper end. A total of three coho juveniles were successfully captured at two of the locations. The first of these yielded one fish and was located within the small muskeg reach of the stream just below the Unit 117 boundary. The other capture, which yielded two fish, was made adjacent to the Unit 117 boundary, approximately 1000 feet downstream of the lake outlet.

Barriers to fish passage are non-existent within this stream and, throughout its length, the gradient averages well under 7 percent with a few very short reaches slightly exceeding that gradient. As indicated in our March 29, 1991 inspection report, channel morphological control is variable with some sections exhibiting vegetated banks and others geomorphologic containment. However, based on the substantial predominance of type A characteristics

throughout, the stream is classified as such and, as per AS 41.17.116, requires the retention of a 66 foot no-cut buffer along its entire length.

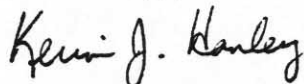
Linney Creek

A total of three baited traps were set at various locations within the lower 350 foot reach of the stream. None of these traps yielded fish. Given the relatively narrow width, shallow depth, and stair-stepping nature of this stream and, more importantly, the virtual lack of anadromous rearing habitat throughout the reach observed, this result was not surprising. However, pink salmon spawning habitat may exist within the intertidal portion and to approximately 30-40 feet upstream.

Although we were unable to document the stream as anadromous, it is likely that it supports a population of resident species such as cutthroat trout and Dolly Varden char. Helicopter yarding is proposed to complete the harvest of Unit 111 with directional felling and the retention of a relatively large amount of low value and non-merchantable timber along the stream. We are pleased to see such planned protection afforded to this stream.

Your cooperation in completing this inspection is very much appreciated. If you have any need to discuss this report, please contact us at 225-2027.

Sincerely,



Kevin J. Hanley  
Habitat Biologist

cc: R. Reed, ADF&G, Juneau  
J. Gustafson, ADF&G, Ketchikan  
A. Peterson, ADNR, Ketchikan  
C. Kent, ADEC, Juneau  
M. Keith, ADEC, Ketchikan  
R. Zeman, Zeman Logging, Ketchikan  
L. Thompson, Kavilco, Inc., Kasaan